

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 13 FEB 2006

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Applicant's or agent's file reference P019808WO		FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/GB2005/001045		International filing date (day/month/year) 18.03.2005		Priority date (day/month/year) 18.03.2004
International Patent Classification (IPC) or national classification and IPC H04Q7/22				
Applicant TELSIS HOLDINGS LIMITED et al				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 23.08.2005		Date of completion of this report 10.02.2006		
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Rabe, M Telephone No. +49 89 2399-		



**INTERNATIONAL PRELIMINARY REPORT
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International application No.
PCT/GB2005/001045

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-11 as originally filed

Claims, Numbers

1-12 as originally filed

Drawings, Sheets

1/3-3/3 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-12
	No: Claims	
Inventive step (IS)	Yes: Claims	1-12
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Reference is made to the following documents:

D1: WO 01/22752 A1

D2: WO 01/53965 A1

A. Citations and explanations made in respect of paragraph V:

1. The present invention relates to a telecommunications services **apparatus** and to a corresponding telecommunications services **method** according to the features of respective **independent claims 1 and 6**, as well as to a corresponding **computer program** and **storage medium** according to respective **claims 11 and 12**.
2. **Generally**, mobile messaging (such as SMS messaging) is well known in the field of wireless communications, as shows for example the disclosure of document **D1** which describes a short message gateway between different networks, wherein a SMS message is transmitted from a first network to a mobile station in another network, wherein the gateway obtains routing information from a HLR related to the first network by sending a SRI_SM (Send Routing Information for Short Mes-sage) message to said HLR, which responds with a SRI response indicating the roaming number of the mobile station.

A main problem related to mobile messaging is that of unwanted or unsolicited mobile messages sent to destination mobile stations, wherein types of such unwanted messaging are categorized as MT (mobile terminated) Spam (ie. Spam, Flooding, MT Faking) and MO (mobile originated) Spoofing. In MT Spam, MT Faking is a significant problem in that it is used as a vehicle for Flooding or Spam while allowing the perpetrators to remain anonymous, wherein the operator whose SMSC address has been faked into the MT message is charged for messages that he did not send.

Document **D2** discloses a filter for countering Spam in a messaging system (e-mail), wherein message content is monitored in an intelligent fashion to detect likely occurrences of Spam.

3. A main **disadvantage** related to the known methods of the above type for counter-terg Spam is that content monitoring may have regulatory problems and only provides detection after an indicative level of messaging has already happened.
4. The **present invention** overcomes this disadvantage by providing a telecommunications services **apparatus** and a corresponding telecommunications services **method** according to the features of respective **independent claims 1 and 6**, as well as a corresponding **computer program** and **storage medium** according to respective **claims 11 and 12**.

According to the **essential features of the invention**, a MAP SRI_SM (Send Routing Information for Short Message) message originating from another network is received and forwarded to a HLR, a response is received from the HLR to the SRI_SM message, and information relating to said SRI_SM response is temporarily stored; the response is passed on to a network address identified as the originating address, a MAP MT_Fwd_SM (Mobile Terminated Forward Short Message) message from said other network is received and the MT_Fwd_SM message is correlated with a previously-sent SRI_SM response using stored (temporarily) information; MT_Fwd_SM messages for which there is at least insufficient correlation between the MT_Fwd_SM message and the previously-sent SRI_SM response are detected and selectively rejected, whereas other MT_Fwd_SM messages are passed on to their respective destinations.

5. The present invention provides the **advantage** of enabling an effective blocking of MT Spam, without requiring content monitoring of the messages.
6. The subject-matter of the present invention as claimed in respective independent claims 1 and 6 (as well as in respective claims 11 and 12) is neither disclosed in, nor rendered obvious by the remaining **prior art documents** cited in the international search report since said documents, which merely relate to a very general state of the art of mobile messaging, do **not** describe or render (in combination) obvious the apparatus and method according to the particular feature combination of the present invention or part thereof as defined in said respective claims 1 and 6.

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7. The subject-matter of independent claims 1 and 6 (as well as that of respective claims 11 and 12) therefore is considered to be **new** and to **involve an inventive step**, Article 33 (2) and (3) PCT.
8. As **claims 2 to 5 and 7 to 10** are dependent on respective independent claims 1 and 6, said claims 2 to 5 and 7 to 10 do **also meet** the requirements of Article 33 (2) and (3) PCT.
9. The present invention is **susceptible of industrial application**, Article 33 (4) PCT.

B. Further remarks made in respect of the present application:

1. **Reference signs** in parentheses should have been inserted in the claims to increase their intelligibility, Rule 6.2 (b) PCT.
2. To meet the requirements of Rule 5.1 (a) (ii) PCT, the cited document **D1** should have been acknowledged and briefly discussed in the opening part of the description.